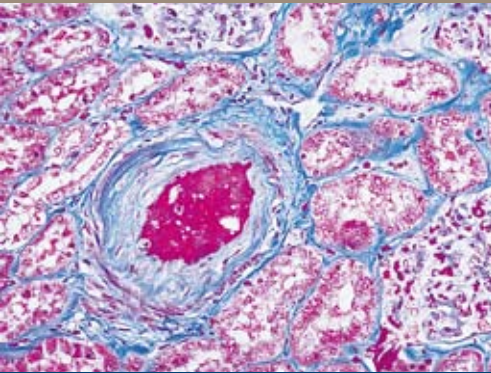


Thermo Scientific Microm HM 430/HM 450 Sliding Microtomes



Design Ergonomy

Multi-purpose Sliding Microtomes for routine, research and industry

The true innovation in microtome engineering

The experience gained over decades in close relationship with scientists and engineers throughout the world combined with our daily effort to achieve better engineering solutions in the development of products of utmost reliability, user benefit and up-to-date operator comfort.

Outstanding performance

The performance of the two sliding microtomes Thermo Scientific Microm HM 430 and HM 450 regarding reliability, ergonomics and design far exceed today's standards. Highest precision and stability guarantee fast, safe and comfortable operation. The roller-guided knife sledge guidance results in an unachieved smooth running of the knife sledge movement for comfortable and non-tiring working with highest stability.

Design and ergonomics

The elegant housing was stream-line-shaped and includes all ergonomic aspects for a comfortable, intuitive working with the instruments.

Various applications

A large variety of accessories for most different applications in medicine and industry will satisfy all application needs.

HM 430 – mechanical sliding microtome for routine and research

The technology of the HM 430 is based on our expertise for many years in producing innovative and high precision microtomes. The long sledge offers new application ranges in histology, pathology, research and industry. Easily accessible operating elements and the selection between manual and automatic feed by simply turning one knob is another proof for our endeavour to tailor our products to the users' needs by intelligent innovations.

Ergonomically shaped sledge handle – thus you can handily control sectioning

Simple, non-tiring operation and elegant design could be combined in an ideal way. Changing the angle of the handle allows the operator to adjust it to his individual posture. On the HM 450 a button on the handle allows for an easy switch between preselected trim and fine section thickness. Ergonomics without compromises!

Large volume waste tray

The easily removable section waste tray is integrated below the specimen holder.



HM 450 – unique sliding microtome with stepping motor feed and retraction

The HM 450 represents a unique innovation among the sliding microtomes. We make use of innovative technology to facilitate the daily routine without any additional steps.

Future oriented technology – comfort without compromise

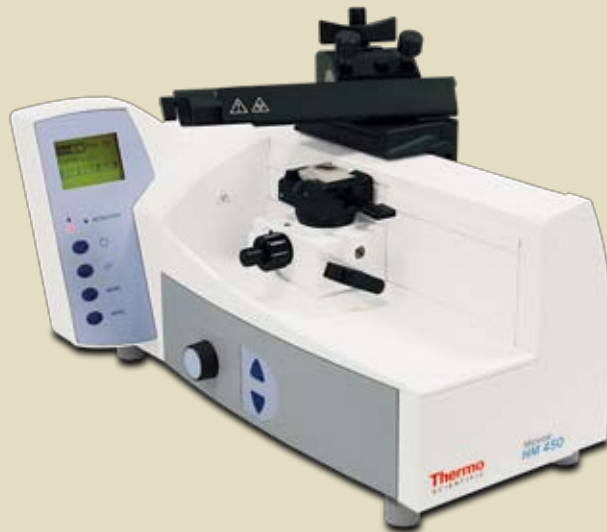
The integration of the stepping motor technology for the specimen feed allows an operator comfort which has been unachieved up to now. Most modern electronic control systems coupled with high-precision fine mechanics result in optimal section quality and best reproducibility of even difficult paraffin embedded specimens as well as of botany or industry preparations. The HM 450 has a retraction during the return travel that can be turned off having positive effects on sectioning. The automatic feed facilitates sectioning by a reproducible exact feed. The feed process is carried out by the reversing movement of the sledge after any sectioning move. This way, large specimens as well as biopsies can be sectioned with the respective adjusted length of sectioning travel, without having to pass a defined feed point.

Memory function: the innovation as an object for the user

By storing a specimen position before the first cuts, an unattained comfort during the approach of the specimen towards the knife is possible. Briefly press the knob to bring a new specimen into first cut position.

Graphical display in two different sizes

Another comfort feature is the backlit graphical display selectable in two different sizes. In the large display mode the section range (fine or trim sectioning) is shown by a symbol and the respective section thickness in large numbers.



Technical data/accessories



KS 34 Fast Freezing Unit

The fast freezing unit KS 34 is designed as table-top unit for the adaptation to a rotary or sliding microtome for cryo sectioning of fixed specimen from biology and medicine as well as for sectioning soft plastics, rubber, textile fibres, wood, etc. The development of an extremely efficient enclosed cooling system ensures:

- Fast freezing-on of specimens
- Temperature regulation and defrosting within seconds
- Fast cooling down to -40°C
- Continuous temperature control from +5°C to -40°C

Various accessories for all applications

For applications in medicine, biology and industry both standard specimen clamps and universal cassette clamps are available. A large variety of knife types and sizes as well as disposable blade rails cover all applications. For industrial applications numerous specific clamping devices are also available or can be produced upon demand.

Technical data HM 430

Stable, distortion-free basic construction with zero-backlash and maintenance-free cross roller bearings

Enclosed housing with protected, interior feed mechanism

Automatic and manual feed from 0 to 60 µm

Automatic feed via turning knob can be selected in addition

Feed position can be selected via clamping lever

Section thickness feed: from 0 to 10 µm in 1 µm-increments
up to 20 µm in 2 µm-increments
up to 60 µm in 5 µm-increments

Total specimen stroke: 40 mm

Max. sledge travel: 190 mm

Coarse feed wheel with 100 µm division

800 µm/rotation

Specimen orientation via co-axial onehand adjustment

Quick change system of the specimen clamping

Co-axial knife angle adjustment without having to open the knife clamping

Integrated knife guard

Dimensions: (W x D x H): 310 x 490 x 325 mm

Weight: 22 kg

Technical data HM 450

Stable, distortion-free basic construction with zero-backlash and maintenance-free cross roller bearings

Enclosed housing with protected, interior feed mechanism via stepping motor

Automatic and manual feed from 0 to 100 µm

Automatic feed independent of specimen size via reversing the sledge (can be turned off)

Specimen retraction during knife return travel (can be turned off)

Section thickness feed: from 0 to 10 µm in 1 µm-increments
up to 20 µm in 2 µm-increments
up to 60 µm in 5 µm-increments
up to 100 µm in 10 µm-increments

Compensation for heat extension via stepping motor: 2 µm

Total specimen stroke: 40 mm

Max. sledge travel: 190 mm

Specimen orientation via coaxial one-hand adjustment

Quick change system of the specimen clamping

Co-axial knife angle adjustment without having to open the knife clamping

Integrated knife guard

Dimensions: (W x D x H): 360 x 490 x 325 mm

Weight: 22 kg

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Anatomical Pathology

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